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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/088,111 | 03/15/2002 | Hisaaki Gyoten | 43888-125 | 8050 |

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EXAMINER

PARSONS, THOMAS H

| | |
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| ART UNIT | PAPER NUMBER |
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1745

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,111

Applicant(s)

GYOTEN ET AL.

Examiner

Thomas H Parsons

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 17 September 2000. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Specification

2. The disclosure is objected to because of the following informalities:

Page 4, the text beginning on line 4 and ending on line 8 appears awkwardly worded.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000-003718.

JP2000-003718 discloses a method for restoring (activating) performance of a polymer electrolyte fuel cell comprising: a cell body composed of laminated unit cells, each unit cell comprising a cathode and an anode interposing a hydrogen ion-conductive polymer electrolyte membrane therebetween and a pair of conductive separator plates having gas flow paths for

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supplying and discharging an oxidant gas and a fuel gas to and from the cathode and the anode respectively and sandwiching the cathode and the anode therebetween; means for supplying and discharging oxidant gas and fuel gas to and from the body; and means for controlling output of a current generated in said cell body, the method comprising the step of operating the polymer electrolyte fuel cell for a predetermined time either in an operation mode at a current different than that as in a normal operation, or at a current giving an output voltage per unit cell of not more than 0.3 V (paragraphs [0008] through [0020] and [0030].

JP2000-003718 does not disclose an operation mode at a current of not less than 1.5 times as high as that in a normal operation, or in an operation mode at a current giving an output voltage per unit cell of not more than 0.2 V.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adjusted the quantity of gas flow to the desired utilization rates, and regulated potential, thereby achieving the claimed operation mode.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by JP60-77365.

JP60-77365 in Figures 1-3 and the abstract discloses a method for restoring performance (i.e. increasing operating life of a fuel cell) of a polymer electrolyte fuel cell comprising: a cell

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body composed of laminated unit cells (5), each unit cell comprising a cathode (2) and an anode (1) interposing a hydrogen ion-conductive polymer electrolyte membrane (3) therebetween and a pair of conductive separator plates (4) having gas flow paths for supplying and discharging an oxidant gas (11) and a fuel gas (10) to and from the cathode and the anode respectively and sandwiching cathode and anode therebetween; means (8, 9, 6, 7)) for supplying and discharging the oxidant gas and fuel gas to and from the cell body; and means (12) for controlling output of a current generated in the cell body, the method comprising the steps of: supplying an oxidant gas and a fuel gas to the anode and the cathode respectively; and outputting a current from the cell body with the polarity being inverted.

7. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by JP6-260197.

JP6-260197 discloses in Figure 1 and paragraphs [0007] through [0013] a method for restoring (renewing) performance of a polymer electrolyte fuel cell comprising: a cell body composed of laminated unit cells, each unit cell comprising a cathode (3) and an anode (2) interposing a hydrogen ion-conductive polymer electrolyte membrane (1) therebetween and a pair of conductive separator plates having gas flow paths for supplying and discharging an oxidant gas and a fuel gas to and from the cathode and the anode respectively and sandwiching the cathode and the anode therebetween; means for supplying and discharging oxidant gas and fuel gas to and from the cell body, the method comprising the step supplying oxygen to the cathode.

8. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by JP2000-003718.

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JP2000-003718 discloses a method for restoring (activating) performance of a polymer electrolyte fuel cell comprising: a cell body composed of laminated unit cells, each unit cell comprising a cathode and an anode interposing a hydrogen ion-conductive polymer electrolyte membrane therebetween and a pair of conductive separator plates having gas flow paths for supplying and discharging an oxidant gas and a fuel gas to and from the cathode and the anode respectively and sandwiching the cathode and the anode therebetween; means for supplying and discharging oxidant gas and fuel gas to and from the body; and means for controlling output of a current generated in said cell body, the method comprising the step of injecting an acidic solution having a pH of less than 7 into the cathode and the anode through said gas flow path (paragraphs [0008] through [0020] and [0030]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR


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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons
Examiner
Art Unit 1745



Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700